REMARKS

Reconsideration of this application, as amended, is respectfully requested.

Claims 1 and 3-36 are pending. Claims 1 and 3-36 stand rejected.

Claim 1 has been amended. No claims have been cancelled. No claims have been added.

Rejections Under 35 U.S.C. § 102(e)

Claims 1, 3, 8-11, 13-15, 18 and 19 stand rejected under 35 U.S.C. § 102(e) as being anticipated U.S. Patent No. 6,704,879, of Parrish ("Parrish").

Applicants claim, in claim 1, a method, which includes informing, by a graphics controller, a BIOS with an indication of a change related to the system power supply, wherein the informing includes requesting a set of one or more available clock rates.

Parrish discloses a graphics adapter capable of operating at various frequencies depending on a power state of a system. More specifically, Parrish discloses

> When the system 100 is powered on, a processor 102 loads basic input/output system (BIOS) instructions from BIOS read only memory (ROM) 124 into system memory 107 to perform power on self test (POST) operations that check and configure devices of the system 100. Referring also to FIG. 2, during the POST operations, BIOS instructions may be performed to determine the power state of the computer system 100 at block 200, i.e., whether the AC/DC converter 128 is receiving AC power from the electrical outlet 130 or DC power from the battery pack 129. Once a determination has been made, the processor 102 may execute instructions of the graphics BIOS 114 to configure the graphics adapter 110 and set the speed of the oscillator 118 to a frequency corresponding to the power state of the system 100, as shown at block 202.

(Parrish, col. 2, line 12-26) (emphasis added)

In particular, Parrish discloses that

> When the power state changes, the frequency of the oscillator 118 may be modified accordingly. A hardware device, such as the AC/DC converter 128, may generate a hardware interrupt in response to a change in the power state to invoke an interrupt handler, such as a BIOS routine. The interrupt handler may include instructions employing input/output (I/O) addressing techniques to notify the graphics adapter 110 of the change in the power state. The processor 102 may execute instructions of the interrupt handler to write data to an I/O address space. Essentially, the data is transmitted to a port that is mapped to a register 115 on the graphics adapter. The data in the register 115 may include indications of the power state of the computer system 100 including a residual power level, if using the battery pack 129. When data is stored in

> the register 115, a routine of the graphics BIOS 114 may be invoked to respond to the change in power supply by modifying the frequency of the oscillator 118.

(Parrish, col. 23, lines 48-65) (emphasis added)

Thus, Parrish, in contrast, discloses that determining the power state of the computer system and executing instructions of the graphics BIOS (" informing a graphics BIOS") to configure ("modify") the oscillator of the graphics adapter according to the power state is performed by a processor, and not by a graphics controller, as recited in claim 1. Additionally, Parrish merely discloses modifying, by a processor, the oscillator of the graphics adapter to change a frequency and does not disclose, teach, or suggest that informing a BIOS with an indication of a change in the system power supply includes requesting, by a graphics controller, a set of one or more available clock rates, as recited in claim 1.

Accordingly, Parrish, in contrast, fails to disclose, teach, or suggest a limitation of claim 1 of informing, by a graphics controller, a BIOS with an indication of a change related to the system power supply, wherein the informing includes requesting a set of one or more available clock rates.

Because Parrish does not set forth all the limitations of previously presented claim 1, applicants respectfully submit that claim 1 is not anticipated by Parrish under 35 U.S.C. § 102(e).

Given that claims 3-14 depend, directly or indirectly, from claim 1, and add additional limitations, applicants respectfully submit that claims 3-14 are likewise not anticipated by Parrish under 35 U.S.C. § 102(e).

With respect to previously presented claim 15, as set forth above, Parrish, in contrast, discloses modifying by a processor the oscillator of the graphics adapter based on detecting by a processor change in the power state, and not receiving an indication of power reduction in the graphics controller, wherein the receiving the indication includes receiving a request from the

graphics controller for a set of available clock frequencies, as recited in previously presented claim 15. Accordingly, Parrish fails to disclose a limitation of previously presented claim 15 of receiving an indication of power reduction in the graphics controller, wherein the receiving the indication includes receiving a request from the graphics controller for a set of available clock frequencies.

Because Parrish does not set forth all the limitations of previously presented claim 15, applicants respectfully submit that previously presented claim 15 is not anticipated by Parrish under 35 U.S.C. § 102(e).

Given that claims 16-22 depend, directly or indirectly, from claim 15, and add additional limitations, applicants respectfully submit that claims 16-22 are likewise not anticipated by Parrish under 35 U.S.C. § 102(e).

Because claim 36 contains at least the same limitation as discussed above with respect to claim 15, applicants respectfully submit that claim 36 is not anticipated by Parrish under 35 U.S.C. § 102(e).

With respect to previously presented claim 23, Parrish, in contrast, discloses a graphics adapter, wherein a power consumed by the graphics adapter is changed merely by modifying a frequency of the oscillator of the graphics adapter (Parrish, col. 2, lines 27-45) and fails to disclose, teach, or suggest a graphics controller receiving power from a power regulator and having a power supply control output, which provides a trigger signal to the power regulator to change the power supplied to the graphics controller, as recited in previously presented claim 23.

Because Parrish does not set forth all the limitations of previously presented claim 23, applicants respectfully submit that previously presented claim 23 is not anticipated by Parrish under 35 U.S.C. § 102(e).

Given that claims 24-34 depend, directly or indirectly, from claim 23, and add additional limitations, applicants respectfully submit that claims 24-34 are likewise not anticipated by Parrish under 35 U.S.C. § 102(e).

Because claim 35 contains at least the same limitations as previously presented claim 23, applicants respectfully submit that claim 35 is likewise not anticipated by Parrish under 35 U.S.C. § 102(e).

Rejections Under 35 U.S.C. § 103(a)

Claims 4, 5, and 12 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,704,879 of Parrish ("Parrish") in view of U.S. Patent No. 5,349,525 of Dunki-Jacobs et al. ("Dunki-Jacobs"). Claims 6, 7, 16 and 17 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Parrish in view of U.S. Patent No. 6,618,042 of Powell ("Powell"). Claims 20-22 and 36 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Parrish in view of U.S. Patent No. 5,524,249 of Suboh ("Suboh"). Claims 23-35 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Parrish in view of Powell, in further view of Dunki-Jacobs, in further view of Suboh.

With respect to previously presented claim 1, as set forth above, Parrish does not disclose, teach, or suggest informing a BIOS with an indication of a change related to the system power supply by the graphics controller, wherein the informing includes requesting a set of one or more available clock rates.

Dunki-Jacobs, in contrast, discloses an ultrasonic imaging system, wherein a color flow processor has a frequency domain wall filter, and similarly to Parrish, fails to disclose, teach, or suggest such limitation of previously presented claim 1.

Powell, in contrast, merely discloses reducing a display brightness on a portable computer according to a rate limiting function, and similarly to Parrish and Dunki-Jacobs fails to disclose, teach, or suggest such limitation of previously presented claim 1.

Suboh, in contrast, discloses that the video controller writes into registers of phase lock loop circuitry to output a clock with a predetermined frequency and, similarly to Parrish, Dunki-Jacobs, and Powell fails to disclose, teach, or suggest such limitation of previously presented claim 1.

Thus, neither Parrish, Dunki-Jacobs, Powell, nor Suboh discloses, teaches, or suggests a limitation of previously presented claim 1 of informing a BIOS with an indication of a change related to the system power supply by the graphics controller, wherein the informing includes requesting a set of one or more available clock rates.

Therefore, applicants respectfully submit that claim 1 is not obvious under 35 U.S.C. § 103 (a) over the references cited by the Examiner.

Given that claims 3-14 depend, directly or indirectly, from claim 1 and add additional limitations, applicants respectfully submit that claims 3-14 are likewise not obvious under 35 U.S.C. § 103 (a) over the references cited by the Examiner.

With respect to claim 15, as discussed above, Parrish does not disclose receiving an indication of power reduction in the graphics controller, wherein the receiving the indication includes receiving a request from the graphics controller for a set of available clock frequencies.

As set forth above, neither Parrish, Dunki-Jacobs, Powell, nor Suboh discloses, teaches, or suggests such limitation of previously presented claim 15.

Therefore, applicants respectfully submit that claim 15 is not obvious under 35 U.S.C. § 103 (a) over the references cited by the Examiner.

Given that claims 16-22 depend, directly or indirectly, from independent claim 15, and add additional limitations, applicants respectfully submit that claims 16-22 are likewise not obvious under 35 U.S.C. § 103 (a) over the references cited by the Examiner.

Because claim 36 contains at least the same limitation as discussed above with respect to claim 15, applicants respectfully submit that claim 36 is not obvious under 35 U.S.C. § 103 (a) over the references cited by the Examiner.

With respect to claim 23, as discussed above, Parrish fails to disclose, teach, or suggest a graphics controller receiving power from a power regulator and having a power supply control output, which provides a trigger signal to the power regulator to change the power supplied to the graphics controller.

As set forth above, neither Parrish, Dunki-Jacobs, Powell, nor Suboh discloses, teaches, or suggests such limitation of previously presented claim 23.

Therefore, applicants respectfully submit that claim 23 is not obvious under 35 U.S.C. § 103 (a) over the references cited by the Examiner.

Given that claims 24-34 depend, directly or indirectly, from claim 23, and add additional limitations, applicants respectfully submit that claims 24-34 are likewise not obvious under 35 U.S.C. § 103 (a) over the references cited by the Examiner.

Because claim 35 contains at least the same limitation as claim 23, applicants respectfully submit that claim 35 is not obvious under 35 U.S.C. § 103 (a) over the references cited by the Examiner.

It is respectfully submitted that in view of the amendments and arguments set forth herein, the applicable rejections and objections have been overcome. If there are any additional charges, please charge Deposit Account No. 02-2666 for any fee deficiency that may be due.

Respectfully submitted,

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